

Lesson 6 Reteach

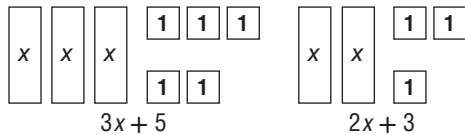
Add Linear Expressions

You can use models to add linear expressions.

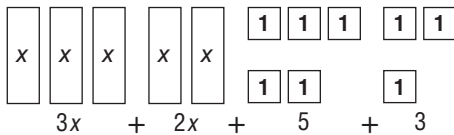
Example 1

Add $(3x + 5) + (2x + 3)$.

Step 1 Model each expression.



Step 2 Combine like tiles and write an expression for the combined tiles.

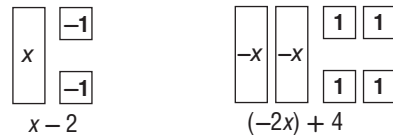


So, $(3x + 5) + (2x + 3) = 5x + 8$.

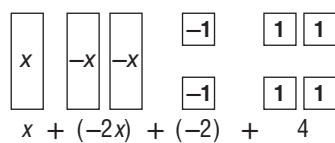
Example 2

Add $(x - 2) + (-2x + 4)$.

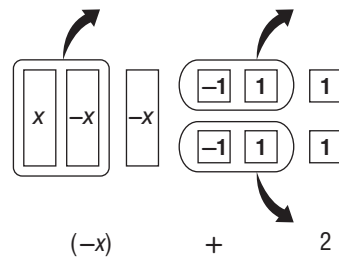
Step 1 Model each expression.



Step 2 Combine like tiles and write an expression for the combined tiles.



Step 3 Remove all zero pairs and write an expression for the remaining tiles.



So, $(x - 2) + (-2x + 4) = -x + 2$.

Exercises

Add. Use models if needed.

1. $(5x + 2) + (3x + 1)$ **$8x + 3$**

2. $(-8x + 1) + (-2x + 6)$ **$-10x + 7$**

3. $(-7x + 4) + (x - 5)$ **$-6x - 1$**

4. $(-6x + 1) + (4x - 1)$ **$-2x$**

Lesson 6 Skills Practice

Add Linear Expressions

Add. Use models if needed.

1. $(5x + 7) + (x + 2)$ **$6x + 9$**

2. $(-6x + 3) + (x - 7)$ **$-5x - 4$**

3. $(-x + 12) + (-4x + 2)$ **$-5x + 14$**

4. $(-5x + 3) + (-7x - 1)$ **$-12x + 2$**

5. $(-x + 3) + (4x - 10)$ **$3x - 7$**

6. $(5x + 4) + (-8x - 2)$ **$-3x + 2$**

7. $(-7x + 1) + (4x - 5)$ **$-3x - 4$**

8. $(6x - 2) + (-x + 5)$ **$5x + 3$**

9. $(-9x + 1) + (-7x + 8)$ **$-16x + 9$**

10. $(-3x - 9) + (4x + 8)$ **$x - 1$**

11. $(-9x - 12) + (x - 8)$ **$-8x - 20$**

12. $(14x + 7) + (-3x + 2)$ **$11x + 9$**

13. $(2x - 1) + (-3x + 7)$ **$-x + 6$**

14. $(-5x + 4) + (-9x - 2)$ **$-14x + 2$**

15. $(11x + 2) + (-8x - 2)$ **$3x$**

16. $(-9x - 10) + (-5x - 4)$ **$-14x - 14$**

17. Find the sum of $(10x + 3)$ and $(-4x - 2)$. **$6x + 1$**

18. Find the sum of $(x + 3)$ and $(-x - 4)$. **-1**

19. **GEOMETRY** Write and simplify an expression to represent the perimeter of the triangle shown. Then find the value of x if the perimeter is 45 feet. **$6x + 3$; 7**

